

IN THE CLAIMS:

Please cancel Claim 23 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 1 and 22 as follows.

1. (Currently Amended) An image forming apparatus including a plurality of electron-emitting devices wired in a matrix, and fluorescent substances for emitting light by electrons emitted by the electron-emitting devices, further comprising:

a circuit configured to output an image signal, based on an input image signal, wherein a frame rate of an image formed by the image signal is higher than a frame rate of the input image signal,

wherein the image signal output by said circuit satisfies the following conditions:

x is a normalized driving time period normalized to a maximum time period, during which time the fluorescent substances are continuously irradiated with electrons emitted from the electron-emitting devices driven by the image signal output from said circuit,

y is a normalized luminance normalized to an amount of light emitted by the fluorescent substances, resulting from irradiation by electrons emitted from the electron-emitting devices in the maximum time period,

in a graph whose abscissa x and ordinate y, a plurality of normalized luminance points which are measured at a plurality of driving time periods, each of which has

equal time intervals less than  $5\ \mu\text{s}$  are plotted on the graph, wherein the plurality of driving time periods do not include  $x=0$  and  $x=1$ ,

the number of normalized luminance points not falling within a range defined by lines  $y=x$  and  $y=x^{0.8}$  on the graph, wherein the range includes a border, ~~are~~ is  $4/15$  or less of the number of the plurality of normalized luminance points;

a plurality of memories including a first memory and a second memory, each of which is configured to store a part of the image signals of one line of the image; **and**

a controller configured to control reading of the image signals from said plurality of memories; **and**

a plurality of shift registers including a first shift register and a second shift register, the first shift register is configured to input an image signal output from the first memory, and said second shift register is configured to input an image signal output from the second memory.

Claim 2. (Cancelled).

3. (Previously Presented) The image forming apparatus according to claim 1, wherein said circuit converts a signal for an interlaced scanning into a signal for a non-interlaced scanning.

4. (Previously Presented) The image forming apparatus according to claim 1, further comprising means for performing pulse width modulation by the image signal output from said circuit.

Claims 5-11. (Cancelled).

12. (Original) The image forming apparatus according to claim 1, wherein the electron-emitting devices are surface-conduction type electron-emitting devices.

Claim 13. (Cancelled).

14. (Original) The image forming apparatus according to claim 1, further comprising an electrode to which a potential for accelerating electrons emitted by the electron-emitting devices applies, wherein the potential is higher by not less than 500 V than a potential applied to the electron-emitting devices in order to emit electrons.

Claim 15. (Cancelled).

16. (Original) The image forming apparatus according to claim 1, further comprising an electrode to which a potential for accelerating electrons emitted by the electron-

emitting devices applies, wherein the potential is higher by not less than 3 kV than a potential applied to the electron-emitting devices in order to emit electrons.

Claim 17. (Cancelled).

18. (Original) The image forming apparatus according to claim 1, further comprising an electrode to which a potential for accelerating electrons emitted by the electron-emitting devices applies, wherein the potential is higher by not less than 5 kV than a potential applied to the electron-emitting devices in order to emit electrons.

Claim 19. (Cancelled).

20. (Previously Presented) The image forming apparatus according to claim 1, wherein the plurality of electron emitting devices and the fluorescent substances are arranged apart from each other.

Claim 21. (Cancelled).

22. (Currently Amended) The image forming apparatus according to claim 1, with wherein said ~~plurality of memories comprising~~ first memory comprises:

~~a plurality of first memories, each of memory which is configured to store a part of a first color image signal of one line of the image[[:]]<sub>1</sub>~~

~~a plurality of second memories, each of memory which is configured to store a part of a second color image signal of one line of the image; and<sub>1</sub>~~

~~a plurality of third memories, each of memory which is configured to store a part of a third color image signal output from said plurality of memories of one line of the image, and~~

~~the second memory comprises a memory which is configured to store another part of the first color image signal of one line of the image, a memory which is configured to store another part of the second color image signal of one line of the image, and a memory which is configured to store another part of the third color image signal of one line of the image.~~

Claim 23. (Cancelled).